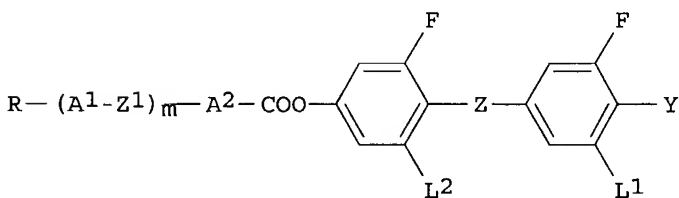


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 DN 134:318777  
 ED Entered STN: 20 Apr 2001  
 TI Ester compounds and their use in liquid crystalline media  
 IN Bremer, Matthias; Heckmeier, Michael; Krause, Joachim; Pauluth, Detlef;  
 Goetz, Achim; Schuler, Brigitte  
 PA Merck Patent G.m.b.H., Germany  
 SO PCT Int. Appl., 158 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA German  
 IC ICM C09K019-30  
 ICS C09K019-42; C09K019-46  
 CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other  
 Reprographic Processes)  
 Section cross-reference(s): 75

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001027221	A1	20010419	WO 2000-EP9287	20000922
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG DE 19949333 A1 20010419 DE 1999-19949333 19991013 EP 1228163 A1 20020807 EP 2000-967750 20000922 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL JP 2003511544 T2 20030325 JP 2001-530427 20000922 PRAI DE 1999-19949333 A 19991013 WO 2000-EP9287 W 20000922 OS MARPAT 134:318777 GI				



I

AB The invention relates to compds. of formula I [R = H, C1-15-alkyl; A1, A2 = trans-1,4-cyclohexylene, 1,4-phenylene, 1,4-cyclohexylene, 1,4-bicyclo-(2,2,2)-octylene, piperidine-1,4-diyl, naphthalene-2,6-diyl, decahydronaphthalene-2,6-diyl, 1,2,3,4-tetrahydronaphthalene-2,6-diyl; Z, A1 = -CO2-, -OCO-, -CH2O-, -OCH2-, -C2H4-, -CH:CH-, -CF2O-, -OCF2-, -C.tplbond.C-, -(CH2)4-, -CH:CHC2H4-, C2F4, single bond; L1, L2 = H, F; Y = F, Cl, CN, halogenated C1-6-alkyl, alkoxy; m = 0, 1] and to a liquid crystalline medium based on a mixture of polar compds. with pos. dielec. anisotropy. The mixture containing one or more compds. of general formula (I) is characterized and suitable for matrix liquid crystal displays. The mixture shows excellent low temperature behavior and switching time.  
 ST ester compd synthesis liq crystal mixt liq crystal display

IT Liquid crystals  
(nematic; synthesis of ester compds. and their use in liquid crystalline media  
suitable for matrix liquid crystal display)

IT Liquid crystal displays  
(synthesis of ester compds. and their use in liquid crystalline media  
suitable  
for matrix liquid crystal display)

IT 76802-59-0 76802-61-4 84540-37-4 84816-56-8 85312-59-0  
96624-52-1 102714-93-2 106349-49-9 131819-23-3 132123-39-8  
132123-45-6 133937-72-1 134412-18-3 135734-60-0 139215-80-8  
163002-74-2 163002-75-3 163035-73-2 173837-35-9 173837-36-0  
174805-87-9 175859-25-3 181943-55-5 279246-65-0 335148-27-1  
RL: PRP (Properties); TEM (Technical or engineered material use); USES  
(Uses)

(mixture; synthesis of ester compds. and their use in liquid crystalline media  
suitable for matrix liquid crystal display)

IT 109-80-8, 1,3-Propanedithiol 1493-13-6, Trifluoromethanesulfonic acid  
2713-33-9, 3,4-Difluorophenol 38289-27-9 38289-29-1 72216-35-4  
99627-05-1, 3,4,5-Trifluorophenol 105931-73-5, 1-Bromo-3-fluoro-4-  
iodobenzene 143418-49-9, 3,4,5-Trifluorophenylboronic acid 176175-97-6  
RL: RCT (Reactant); RACT (Reactant or reagent)

(synthesis of ester compds. and their use in liquid crystalline media  
suitable  
for matrix liquid crystal display)

IT 114045-96-4P 187804-77-9P 335125-98-9P 335132-71-3P 335132-72-4P  
335132-73-5P 335140-79-9P 335140-82-4P 335140-84-6P 335140-86-8P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(synthesis of ester compds. and their use in liquid crystalline media  
suitable

for matrix liquid crystal display)

IT 335126-00-6P 335126-02-8P 335126-04-0P 335126-06-2P 335126-08-4P  
335126-10-8P 335126-12-0P 335126-14-2P 335126-16-4P 335126-18-6P  
335126-20-0P 335126-22-2P 335126-24-4P 335126-26-6P 335126-28-8P  
335126-30-2P 335126-32-4P 335126-34-6P 335126-36-8P 335126-38-0P  
335126-41-5P 335126-43-7P 335126-45-9P 335126-47-1P 335126-49-3P  
335126-52-8P 335126-55-1P 335126-57-3P 335126-59-5P 335126-61-9P  
335126-63-1P 335126-65-3P 335126-67-5P 335126-69-7P 335126-71-1P  
335126-73-3P 335126-75-5P 335126-77-7P 335126-79-9P 335126-81-3P  
335126-83-5P 335126-85-7P 335126-87-9P 335126-89-1P 335126-91-5P  
335126-93-7P 335126-95-9P 335126-97-1P 335126-99-3P 335127-01-0P  
335127-03-2P 335127-05-4P 335127-07-6P 335127-09-8P 335127-11-2P  
335127-13-4P 335127-15-6P 335127-17-8P 335127-19-0P 335127-21-4P  
335127-23-6P 335127-25-8P 335127-27-0P 335127-29-2P 335127-31-6P  
335127-33-8P 335127-35-0P 335127-37-2P 335127-39-4P 335127-41-8P  
335127-43-0P 335127-45-2P 335127-47-4P 335127-49-6P 335127-51-0P  
335127-53-2P 335127-55-4P 335127-56-5P 335127-58-7P 335127-60-1P  
335127-62-3P 335127-64-5P 335127-66-7P 335127-68-9P 335127-70-3P  
335127-72-5P 335127-74-7P 335127-76-9P 335127-78-1P 335127-80-5P  
335127-82-7P 335127-84-9P 335127-86-1P 335127-88-3P 335127-90-7P  
335127-92-9P 335127-94-1P 335127-96-3P 335127-98-5P 335128-00-2P  
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335128-52-4P 335128-53-5P 335128-54-6P 335128-55-7P 335128-57-9P  
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335128-63-7P 335128-64-8P 335128-65-9P 335128-66-0P 335128-67-1P  
335128-68-2P 335128-69-3P 335128-70-6P 335128-71-7P 335128-72-8P

335128-73-9P	335128-74-0P	335128-75-1P	335128-76-2P	335128-77-3P
335128-78-4P	335128-79-5P	335128-81-9P	335128-82-0P	335128-83-1P
335128-84-2P	335128-85-3P	335128-86-4P	335128-87-5P	335128-88-6P
335128-89-7P	335128-90-0P	335128-91-1P	335128-92-2P	335128-93-3P
335128-94-4P	335128-95-5P	335128-96-6P	335128-97-7P	335128-98-8P
335128-99-9P	335129-00-5P	335129-01-6P	335129-02-7P	335129-03-8P
335129-04-9P	335129-05-0P	335129-06-1P	335129-07-2P	335129-08-3P
335129-09-4P	335129-10-7P	335129-11-8P	335129-12-9P	335129-13-0P
335129-14-1P	335129-15-2P	335129-16-3P	335129-17-4P	335129-18-5P
335129-19-6P	335129-20-9P	335129-21-0P	335129-22-1P	335129-23-2P
335129-24-3P	335129-25-4P	335129-26-5P	335129-28-7P	335129-30-1P
335129-31-2P	335129-32-3P	335129-33-4P	335129-34-5P	335129-35-6P
335129-36-7P	335129-37-8P	335129-38-9P	335129-39-0P	335129-40-3P
335129-41-4P	335129-42-5P	335129-44-7P	335129-45-8P	335129-46-9P
335129-47-0P	335129-48-1P	335129-49-2P	335129-50-5P	335129-51-6P
335129-52-7P	335129-53-8P	335129-54-9P	335129-55-0P	335129-56-1P
335129-57-2P	335129-58-3P			

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(synthesis of ester compds. and their use in liquid crystalline media suitable

for matrix liquid crystal display)

IT	335129-59-4P	335129-60-7P	335129-61-8P	335129-62-9P	335129-63-0P
	335129-64-1P	335129-65-2P	335129-66-3P	335129-67-4P	335129-68-5P
	335129-69-6P	335129-70-9P	335129-71-0P	335129-72-1P	335129-73-2P
	335129-74-3P	335129-75-4P	335129-76-5P	335129-77-6P	335129-78-7P
	335129-79-8P	335129-80-1P	335129-81-2P	335129-82-3P	335129-83-4P
	335129-84-5P	335129-85-6P	335129-86-7P	335129-87-8P	335129-89-0P
	335129-90-3P	335129-91-4P	335129-92-5P	335129-93-6P	335129-94-7P
	335129-95-8P	335129-96-9P	335129-97-0P	335129-98-1P	335129-99-2P
	335130-00-2P	335130-01-3P	335130-02-4P	335130-03-5P	335130-04-6P
	335130-05-7P	335130-06-8P	335130-07-9P	335130-08-0P	335130-09-1P
	335130-11-5P	335130-12-6P	335130-14-8P	335130-15-9P	335130-17-1P
	335130-18-2P	335130-19-3P	335130-20-6P	335130-21-7P	335130-22-8P
	335130-23-9P	335130-24-0P	335130-26-2P	335130-28-4P	335130-29-5P
	335130-31-9P	335130-33-1P	335130-35-3P	335130-37-5P	335130-39-7P
	335130-41-1P	335130-43-3P	335130-45-5P	335130-47-7P	335130-49-9P
	335130-50-2P	335130-51-3P	335130-53-5P	335130-54-6P	335130-56-8P
	335130-58-0P	335130-59-1P	335130-60-4P	335130-61-5P	335130-63-7P
	335130-65-9P	335130-67-1P	335130-68-2P	335130-70-6P	335130-72-8P
	335130-74-0P	335130-77-3P	335130-79-5P	335130-80-8P	335130-81-9P
	335130-82-0P	335130-83-1P	335130-84-2P	335130-85-3P	335130-86-4P
	335130-88-6P	335130-90-0P	335130-92-2P	335130-94-4P	335130-96-6P
	335130-97-7P	335130-99-9P	335131-01-6P	335131-03-8P	335131-05-0P
	335131-07-2P	335131-08-3P	335131-10-7P	335131-11-8P	335131-14-1P
	335131-15-2P	335131-17-4P	335131-18-5P	335131-19-6P	335131-20-9P
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	335131-38-9P	335131-39-0P	335131-40-3P	335131-41-4P	335131-42-5P
	335131-43-6P	335131-44-7P	335131-45-8P	335131-46-9P	335131-47-0P
	335131-48-1P	335131-49-2P	335131-50-5P	335131-51-6P	335131-52-7P
	335131-53-8P	335131-54-9P	335131-55-0P	335131-56-1P	335131-57-2P
	335131-58-3P	335131-59-4P	335131-60-7P	335131-61-8P	335131-62-9P
	335131-63-0P	335131-64-1P	335131-65-2P	335131-66-3P	335131-67-4P
	335131-68-5P	335131-69-6P	335131-70-9P	335131-71-0P	335131-72-1P
	335131-73-2P	335131-74-3P	335131-75-4P	335131-76-5P	335131-77-6P
	335131-78-7P	335131-79-8P	335131-80-1P	335131-81-2P	335131-82-3P
	335131-83-4P	335131-84-5P	335131-85-6P	335131-86-7P	335131-87-8P
	335131-88-9P	335131-89-0P	335131-90-3P	335131-91-4P	335131-92-5P
	335131-93-6P	335131-94-7P	335131-95-8P	335131-96-9P	335131-97-0P
	335131-98-1P	335131-99-2P	335132-00-8P	335132-01-9P	335132-02-0P
	335132-03-1P	335132-04-2P	335132-05-3P	335132-06-4P	335132-07-5P
	335132-08-6P	335132-09-7P	335132-10-0P	335132-11-1P	335132-12-2P
	335132-13-3P	335132-14-4P	335132-15-5P	335132-16-6P	335132-17-7P

335132-18-8P	335132-19-9P	335132-20-2P	335132-21-3P	335132-22-4P
335132-23-5P	335132-24-6P	335132-25-7P	335132-26-8P	335132-27-9P
335132-28-0P	335132-29-1P	335132-30-4P	335132-31-5P	335132-32-6P
335132-33-7P	335132-34-8P	335132-35-9P	335132-36-0P	335132-37-1P
335132-38-2P	335132-39-3P	335132-40-6P	335132-41-7P	335132-42-8P
335132-43-9P	335132-44-0P			

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(synthesis of ester compds. and their use in liquid crystalline media

suitable

for matrix liquid crystal display)

IT	335132-45-1P	335132-46-2P	335132-47-3P	335132-48-4P	335132-49-5P
	335132-50-8P	335132-51-9P	335132-52-0P	335132-53-1P	335132-54-2P
	335132-55-3P	335132-56-4P	335132-57-5P	335132-58-6P	335132-59-7P
	335132-60-0P	335132-61-1P	335132-62-2P	335132-63-3P	335132-64-4P
	335132-65-5P	335132-66-6P	335132-67-7P	335132-68-8P	335132-69-9P
	335132-74-6P	335132-75-7P	335132-76-8P		
	335132-77-9P	335132-78-0P	335132-79-1P		
	335132-80-4P	335132-81-5P	335132-82-6P		
	335132-83-7P	335132-84-8P	335132-85-9P		
	335132-86-0P	335132-87-1P	335132-88-2P		
	335132-89-3P	335132-90-6P	335132-91-7P		
	335132-92-8P	335132-93-9P	335132-94-0P		
	335132-95-1P	335132-96-2P	335132-97-3P		
	335132-98-4P	335132-99-5P	335133-00-1P		
	335133-01-2P	335133-02-3P	335133-03-4P		
	335133-04-5P	335133-05-6P	335133-06-7P		
	335133-07-8P	335133-09-0P	335133-10-3P		
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	335133-14-7P	335133-15-8P	335133-16-9P		
	335133-17-0P	335133-18-1P	335133-19-2P		
	335133-20-5P	335133-21-6P	335133-22-7P		
	335133-23-8P	335133-24-9P	335133-25-0P		
	335133-26-1P	335133-27-2P	335133-28-3P		
	335133-29-4P	335133-30-7P	335133-31-8P		
	335133-32-9P	335133-33-0P	335133-34-1P		
	335133-35-2P	335133-36-3P	335133-37-4P		
	335133-38-5P	335133-39-6P	335133-40-9P		
	335133-41-0P	335133-42-1P	335133-43-2P		
	335133-44-3P	335133-45-4P	335133-46-5P		
	335133-47-6P	335133-48-7P	335133-49-8P		
	335133-50-1P	335133-51-2P	335133-52-3P		
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	335133-56-7P	335133-57-8P	335133-58-9P		
	335133-59-0P	335133-60-3P	335133-61-4P		
	335133-62-5P	335133-63-6P	335133-64-7P		
	335133-65-8P	335133-66-9P	335133-67-0P		
	335133-68-1P	335133-69-2P	335133-70-5P		
	335133-71-6P	335133-72-7P	335133-73-8P		
	335133-74-9P	335133-75-0P	335133-76-1P		
	335133-77-2P	335133-78-3P	335133-79-4P		
	335133-80-7P	335133-81-8P	335133-82-9P		
	335133-83-0P	335133-84-1P	335133-85-2P		
	335133-86-3P	335133-87-4P	335133-88-5P		
	335133-89-6P	335133-90-9P	335133-91-0P		
	335133-92-1P	335133-93-2P	335133-94-3P		
	335133-95-4P	335133-96-5P	335133-97-6P		
	335133-98-7P	335133-99-8P	335134-00-4P		
	335134-01-5P	335134-02-6P	335134-03-7P		
	335134-04-8P	335134-05-9P	335134-06-0P		
	335134-07-1P	335134-08-2P	335134-09-3P		
	335134-10-6P	335134-11-7P	335134-12-8P		
	335134-13-9P	335134-14-0P	335134-15-1P		
	335134-16-2P	335134-17-3P	335134-18-4P		

335134-19-5P 335134-20-8P 335134-21-9P  
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 335134-28-6P 335134-29-7P 335134-30-0P  
 335134-31-1P 335134-32-2P 335134-33-3P  
 335134-34-4P 335134-35-5P 335134-36-6P  
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RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(synthesis of ester compds. and their use in liquid crystalline media suitable

for matrix liquid crystal display)

IT	335134-92-4P	335134-93-5P	335134-94-6P	335134-95-7P	335134-97-9P
	335134-99-1P	335135-01-8P	335135-03-0P	335135-05-2P	335135-07-4P
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	335135-19-8P	335135-21-2P	335135-23-4P	335135-25-6P	335135-27-8P
	335135-30-3P	335135-32-5P	335135-34-7P	335135-36-9P	335135-38-1P
	335135-40-5P	335135-42-7P	335135-44-9P	335135-46-1P	335135-48-3P
	335135-50-7P	335135-52-9P	335135-54-1P	335135-56-3P	335135-58-5P
	335135-60-9P	335135-64-3P	335135-66-5P	335135-68-7P	335135-70-1P
	335135-72-3P	335135-74-5P	335135-76-7P	335135-78-9P	335135-80-3P
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 335139-76-9P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(synthesis of ester compds. and their use in liquid crystalline media suitable

for matrix liquid crystal display)

IT 335139-78-1P 335139-80-5P 335139-82-7P  
 335139-84-9P 335139-86-1P 335139-88-3P  
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RL: SPN (Synthetic preparation); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)

(synthesis of ester compds. and their use in liquid crystalline media  
 suitable

for matrix liquid crystal display)

IT 335144-92-8P 335144-94-0P 335144-96-2P  
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 335145-41-0P 335145-42-1P 335145-43-2P 335145-44-3P 335145-45-4P

335145-46-5P	335145-47-6P	335145-48-7P	335145-49-8P	335145-50-1P
335145-51-2P	335145-52-3P	335145-53-4P	335145-54-5P	335145-55-6P
335145-56-7P	335145-57-8P	335145-58-9P	335145-59-0P	335145-60-3P
335145-61-4P	335145-62-5P	335145-63-6P	335145-64-7P	335145-65-8P
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335145-71-6P	335145-72-7P	335145-73-8P	335145-74-9P	335145-75-0P
335145-76-1P	335145-78-3P	335145-80-7P	335145-83-0P	335145-85-2P
335145-86-3P	335145-87-4P	335145-88-5P	335145-89-6P	335145-90-9P
335145-91-0P	335145-92-1P	335145-93-2P	335145-94-3P	335145-95-4P
335145-96-5P	335145-97-6P	335145-99-8P	335146-00-4P	335146-02-6P
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335146-70-8P	335146-71-9P	335146-72-0P		
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RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(synthesis of ester compds. and their use in liquid crystalline media suitable

for matrix liquid crystal display)

IT 335147-53-0P 335147-54-1P 335147-55-2P  
335147-56-3P 335147-57-4P 335147-58-5P



335147-59-6P 335147-60-9P 335147-61-0P  
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335148-26-0P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material  
use); PREP (Preparation); USES (Uses)

(synthesis of ester compds. and their use in liquid crystalline media  
suitable

for matrix liquid crystal display)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE

- (1) Chisso Corp; EP 0786508 A 1997 CAPLUS
- (2) Chisso Corp; EP 0786509 A 1997 CAPLUS
- (3) Chisso Corp; EP 0820976 A 1998 CAPLUS
- (4) Chisso Corp; EP 0844229 A 1998 CAPLUS
- (5) Chisso Corp; EP 0846670 A 1998 CAPLUS
- (6) Chisso Corp; EP 1010687 A 2000 CAPLUS
- (7) Merck Patent Gmbh; DE 19859421 A 2000 CAPLUS